

Title (en)

COATING COMPOSITION, PROCESS FOR PREPARING THE COMPOSITION, AND PROCESS FOR PREPARING DISPERSION OF INORGANIC OXIDE SOL

Title (de)

ÜBERZUGSZUSAMMENSETZUNG, VERFAHREN ZU IHRER HERSTELLUNG UND VERFAHREN ZUR HERSTELLUNG EINER ANORGANISCHEN OXIDSOLDISPERSION

Title (fr)

COMPOSITION DE REVETEMENT, PROCEDE D'ELABORATION DE CETTE COMPOSITION ET PROCEDE D'ELABORATION D'UNE DISPERSION DE SOL D'OXYDE INORGANIQUE

Publication

**EP 0768351 B1 20010919 (EN)**

Application

**EP 96912222 A 19960424**

Priority

- JP 9601114 W 19960424
- JP 12899895 A 19950428
- JP 34699095 A 19951214

Abstract (en)

[origin: EP0768351A1] A coating composition which comprises: (A) a resin having a glass transition temperature of 50 to 120 DEG C., a number average molecular weight of 2,000 to 100,000, a hydroxyl value of 50 to 150 mgKOH/g and an acid value of 1 to 25 mgKOH/g, which is produced by copolymerizing 10 to 90 percent by weight of (a) a (meth) acrylic acid ester of an alkyl alcohol of 1 to 12 carbon atoms, 10 to 50 percent by weight of (b) a polymerizable double bond-containing and hydroxyl group-containing monomer, 0.1 to 10 percent by weight of (c) a polymerizable double bond-containing and carboxyl group-containing monomer, 0 to 20 percent by weight of (d) styrene, 0 to 20 percent by weight of (e) acrylonitrile and 0 to 10 percent by weight of (f) other polymerizable double bond-containing monomer, (B) at least one compound selected from the group consisting of a polyisocyanate compound having two or more isocyanate groups and/or blocked isocyanate groups in the molecule and an aminoplast resin, (C) a dispersing component of at least one inorganic oxide sol selected from the group consisting of an aluminium oxide sol, a silica sol, a zirconium oxide sol and an antimony oxide sol, wherein an amount of a nonvolatile matter of ingredient (C) is 5 to 60percent by weight based on a total nonvolatile matter of ingredient (A), ingredient (B) and ingredient (C), and a process for preparing a coating composition which comprises: preparing the resin (A), adding the dispersing component of an inorganic oxide sol (C) into a polymerization liquid containing the resin (A) after finishing of the copolymerization of the resin (A) to produce a organic-inorganic composite, and then mixing the organic-inorganic composite and ingredient (b). The coating compositions give the cured films having excellent weathering resistance, light resistance, stain resistance, stain-removing property, chemical resistance, moisture resistance and appearance and is excellent in environment friendliness and safety.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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